

Application Serial No: 10/631,221
In reply to Office Action of 11 November 2004

Attorney Docket No. 76589

AMENDMENTS TO THE CLAIMS

Claims 1-4 (canceled).

5. (withdrawn) A method for manufacturing a cable assembly comprising:

providing a length of heat shrinkable tubing;

inflating said heat shrinkable tubing to expand said tubing to its dilated condition;

inserting a core structure having a diameter less than the inner diameter of said tubing in it dilated condition into the inflated heat shrinkable tubing while the latter is in its dilated condition; and

shrinking said tubing about said core structure.

6. (withdrawn) The method according to claim 5, further comprising applying a layer of adhesive material to said core structure prior to inserting said core structure into said heat shrinkable tubing.

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7. (withdrawn) The method of claim 6, wherein said applying of the adhesive material to the core structure prior to it being inserted into said heat shrinkable tubing comprises providing the adhesive material in a form of heat meltable tape spirally wrapped around said core with overlap between each successive wrap around the girth of the core structure.

8. (withdrawn) The method of claim 7 further comprising:

providing a hot air gun; and

shrinking said shrinkable tubing and melting said adhesive material using hot air generated by said hot air gun.

9. (withdrawn) The method of claim 5, wherein:

said inflating the tubing comprises introducing a flow of compressed gaseous medium to one of the opposite ends of the heat shrinkable tubing; and

said inserting the core structure into the heat shrinkable tubing comprises introducing one end of said core structure into the dilated other end of the heat

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shrinkable tubing and while the compressed gaseous medium is flowed into the tubing moving the core structure to a final position wherein it is substantially encircled by the tubing.

10. (withdrawn) The method of claim 9, and:

said core structure at said one end thereof which is the end by which it is introduced into the heat shrinkable tubing having a cable-end grip device;

providing a pull line having one and another ends, said pull line having one of its ends tied to said cable-end grip device, said pull line as it extends from said tied end being threaded through the bore of the heat shrinkable tubing and projecting out of said one end of the tubing and forming a linearly extending purchase portion of the line outside the tube; and

said moving of the core structure while gaseous medium is flowed into the heat shrinkable tubing comprises pulling the purchase portion of the pull line until the core structure is in its final position.

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11. (withdrawn) The method of claim 5, and

providing a hot air gun; and

shrinking said shrinkable tubing and melting said adhesive material using hot air generated by said hot air gun.

12. (canceled).

13. (currently amended) The cable section assembly of claim [[12]] 15, wherein said heat shrinkable tubing is formed from a material selected from the group consisting of polyolefin and fluoropolymer.

14. (canceled).

15. (currently amended) ~~The~~ A cable section assembly of ~~claim 14,~~ wherein a type having a range of outer diameter between about 0.5 and 0.75 inches and whose length is limited by the size of practical clamshell overmolding apparatus, said cable section assembly comprising:

a core structure;

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a casing for adding stiffness to the cable and for preventing damage to said core structure during handling and deployment, said casing surrounding said core structure and being formed from a thermoplastic heat shrinkable tubing;

said core structure being of the type whose outer surface which presents itself to the bore surface of said heat shrinkable tubing is formed of at least one longitudinally extending member made of molded polyurethane-based material;

a layer of thermoplastic adhesive material between said core and said casing, said adhesive material bonding said core structure with said casing;

said thermoplastic heat shrinkable tubing has a predetermined tube wall thickness so chosen to adapt the tubing to exert sufficient constrictive forces upon said adhesive layer to cause the exterior of the assembly to be uniformly formed throughout its length; and

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said predetermined thickness is about 1/16th of an inch.

16. (currently amended) The cable section assembly of claim [[12]] 15, wherein the outer surface of the core and the bore of the heat shrinkable tubing each have concentric cylindrical shapes, and:

said layer of thermoplastic material being in a form of heat meltable tape spirally wrapped around said core structure with overlap between each successive wrap around the core structure's girth.

17. (canceled).

18. (currently amended) The cable assembly of claim [[12]] 15, further comprising:

said core structure including a central flexible conduit and at least one linearly extending energy transmission medium extending through the conduit; and

said at least one energy transmission medium being selected from the group of transmission media consisting of an

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electric wire, a microwave coaxial cable, and a fiber
optic line.